

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: "Benjamin D. Hall" <bdhall@ghgcorp.com>
Subject: ***CORRECTION TO CRYSTAL TEST OSCILLATOR***
Message-ID: <32239E98.4127@ghgcorp.com>

WHOOOP WHOOOP WHOOOP!!! DINGBAT ALERT! Hey folks, I goofed in the earlier schematic. Battery is upside down. Fixed schematic below. Text repeated for completeness.

Okay fellow fine firebottle fanatics, this is my first attempt at ascii schematic work, so no laughing!

Judging by the 20 or so e-mails I got, I figured this would be appropriate to post to the list. Feel free to put it into web pages, Baa archives, whatever, but please give credit to Mr. William L. Smith, W3GKP, the author.

It is from Hints And Kinks, Volume VII, page 105.

"The circuit shown [below] was circulated among MARS members recently. [editors note: recently is 1965, 8 years before yours truly was born!] It will oscillate with any good crystal having a fundamental frequency between 3 and 20 Mc. No tuning is necessary. The output is sufficient to be heard in a receiver or to be measured with a frequency meter.

The transistor, Q1, shown [below] is very inexpensive. Other p-n-p types may be used, such as the 2N1178 through 2N1180, or the 2N1742. The transistor may be wired in the unit or mounted in a socket. If a socket is used, the device can also be used to check the oscillating ability of different transistors.

The 9-volt battery, BT1, is the type made for pocket transistor radios. For the best stability, all of the capacitors, except the 0.01 uF, should be silver micas.

During testing, overtone crystals will oscillate on their fundamental. This will be about 1/3 the marked frequency for crystal up to 50 or 60 Mc, and 1/5 that of the marked frequency for crystal marked above 60 Mc.

With a little care, the parts for this unit can be mounted on a 1 1/2 x 2-inch piece of electronic pegboard, such as Vector Terminal Board type 32AA9, and the whole works squeezed into a Bud CU-3016-A (4.25 x 2.25 x 1.5 inch) minibox.

By William L. Smith, W3GKP"

+-----+-----+-----+
| | | |

John Wieder wrote:

< Fellow baers: Does anyone have a source for the old style plugs used for BA
rcvrs
< and xmitters (8 or 11 pins with key slot, I think they are called)? Thanks
in advance
< for any help.
<

I have found a ready supply of male and female 9 and 11 pin (octal
style) connectors for my Collins gear and lately for my SBA linear/exciter
inter-connections, from Ron Follmar who monitors the BA list at times.

His address is ronfol@hilconet.com. I just ordered a few more and I'm
sure he can help. Just send him a message with your needs.

Regards from Hawaii,
Raymond J. Cote

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: RADIIONS@aol.com
Subject: 27VIII96 NR11 633 BYTES CRYSTALS
Message-ID: <960827194129_511138912@emout13.mail.aol.com>

Announcement!

There is a new file available on the archive of boatanchors list.

"CRYSTALS" is for those who:

1. Operate regularly on crystal control
(any mode or band) (regular or random hours)
2. Wish to buy sell or swap crystals
- 3 Wish to seek or share with others resource information about crystals.

crystals (1 part, 4289 bytes)

"CRYSTALS" can be accessed by sending a message to:

listproc@theporch.com

with the text reading

get boatanchors crystals

Very 73,

"TR" WB6TMY

RADIONS@aol.com

=====

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996

From: w5tvw@juno.com

Subject: Re: A New National Holiday?

Message-ID: <19960826.160408.8127.0.W5TVW@juno.com>

Yeah, old Lee is still getting the "glory" isn't he? I've always wondered why they didn't celebrate Howard Armstrong's birthday. The REAL father of radio continues to be ignored. DeForest should rightly be called "the father of the Radio tube" but NOT "the father of radio"!

73

Sandy Blaize, W5TVW

Boat Anchors collected, restored, modified, traded & used!

w5tvw@juno.com

417 Ridgewood Drive,

Metairie, LA., 70001.

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996

From: fbsnyder@mail04.mitre.org (Forrest B. Snyder Jr)

Subject: Re: A New National Holiday?

Message-ID: <960827085658.14946@mail04.mitre.org.0>

Sandy wrote:

"I've always wondered why they didn't celebrate Howard Armstrong's birthday."

An interesting question about an interesting person. After Marconi proved radio would work, and DeForest developed a technology that could help make it practical, it took Armstrong to develop the circuits that finally brought it home. I find it nothing short of amazing that this one man is responsible for the "invention" of the oscillator, the regenerative detector, the super-regenerative detector, the superhetrodyne receiver, and Frequency Modulation.

One of the TV networks (PBS?) did a documentary on the development of radio and the broadcast industry a few years ago that tracked the parallel and often interlocking careers of DeForest, Armstrong, and Sarnoff. Armstrong comes off as an eccentric genius whose ideas were most often stolen by the other two.

Forrest B. Snyder, Jr

N4UTY fbsnyder@mitre.org
RCVR: BC-348-R
XMTR: Johnson Adventurer -- 50 W to a single 807
Johnson Matchbox
40 Meter Center-fed Zepp between two trees at 30 feet
"Sure, it's 1936 technology, but it's GOOD 1936 technology!"

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: badger@telalink.net
Subject: Re: A New National Holiday?
Message-ID: <2.2.32.19960827130817.0067c710@telalink.net>

>Yeah, old Lee is still getting the "glory" isn't he? I've always
>wondered why they didn't celebrate Howard Armstrong's birthday.
>The REAL father of radio continues to be ignored. DeForest should
>rightly be called "the father of the Radio tube" but NOT "the father of
>radio"!

As an aside, DeForest has a nephew that is still alive and sort of in the public spotlight. I don't remember his actual name*, but anyone who is/was a regular viewer of The David Letterman Show has seen him as "Larry 'bud' Melman". I have seen him a couple times over the years at larger broadcast trade shows and such, pitching for NBC.....

*his last name is deForest though. I seem to have drawn a blank on the first name.

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: "Andy Howard, WA4KCY" <102452.362@CompuServe.COM>
Subject: Re: A New National Holiday?
Message-ID: <960827133153_102452.362_DHT49-1@CompuServe.COM>

Sandy,

When you wash it all out, Tesla won the court case as being the first to design a practical radio circuit. The Supreme Court in 1943 said in effect that Tesla's work preceded all others. Unfortunately for Tesla it was too late since he died in 1943. Although some of Tesla's work in the field of radio would be contested by fans of Armstrong, Fleming, DeForest and others, there are areas where he stands alone. Most notably would be in the field of polyphase currents and the invention of the rotating field electric motor.

What say we have a Tesla day. No, lets have Tesla Days since he was born at the stroke or midnight between July 9 and 10, 1856. He was a member of the Serbian minority in Croatia (Yugoslavia). It is easy to see with recent events in that part of the world why he left and came to America.

Regards,

Andy, WA4KCY

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: bill@skeeter.frco.com (William Hawkins)
Subject: Re: A New National Holiday?
Message-ID: <9608271506.AA11395@skeeter.frco.com>

Well, it is also said that Tesla won the patent fight in 1943 so that the US wouldn't have to pay royalties to Italy and Il Duce.

Regards,
Bill Hawkins

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: w5tvw@juno.com
Subject: Re: A New National Holiday?
Message-ID: <19960827.121817.8127.2.W5TVW@juno.com>

I have no argument about Tesla's accomplishments and contributions. Indeed, he did many startling and some of his work is still not fully understood or shrouded in secrecy. I have no argument that indeed Lee deForest did invent the triode tube. Many epic making things thru history were "stumbled onto", often while looking for other things. Edison actually "invented" the first tube but made a few notes and discarded the results, as it contributed nothing to what he was trying to accomplish! DeForest persisted in promoting what he had created, although he REALLY didn't understand how it functioned.

Enter Howard Armstrong. He proved deForest's theories about how the audion functioned were wrong and scientifically analyzed actually what WAS happening, and how a triode tube amplified a signal. Obviously Howard was eccentric, but a very brilliant engineer. I can imagine how he felt the night his regenerative circuit started working! I can't imagine the disappointment and frustration that plagued him and caused him to end his life.

We owe a very great debt to the "Major" not mirely for his inventions, but for the way "he put it all together", and made it work!

73

Sandy Blaize, W5TVW
Boat Anchors collected, restored, modified, traded & used!
w5tvw@juno.com
417 Ridgewood Drive,
Metairie, LA., 70001.

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: JOHN_SEHRING.parti@ecunet.org
Subject: A NEW NATIONAL HOLIDAY? BIRTHDAY OF THE
Message-ID: <9608271730.aa14377@pcusa01.ecunet.org>

Lee DeForest may have invented the Audion (a triode tube) but he surely did not understand fully how it operated. (This fact can be gleaned from his patent apps among other things.)

That was first & correctly done by Howard Armstrong (one of my techno-heroes).

-John Sehring (08/27/96 11:46 am MT @Baker, Montana) UCC wb2eqg

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: "Herb Holeman" <choleman@ptialaska.net>
Subject: AM treatise, part 1
Message-ID: <199608270651.WAA03741@ptialaska.net>

From: Herb_Holeman@admin.state.ak.us
Subject: AM treatise (long)
From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: "Allan Fritsche" <fritsche@msn.com>
Subject: And the winning National Rec is
Message-ID: <UPMAIL03.199608270053560715@msn.com>

Hi Gang, got a lot of responses from the learned group on the best National receiver to shoot for. Mind you this is strikly for SWL and a occasional venture into the Ham Bands. Some probably would say, Have you given up on Hammer's. I say no. Still want an HQ-180AC, but am tired of looking at Hammers at the moment, Some would say, Why not the R390 or A , I say no, I worked on so many of them when I was in the Army Security Agency I could give a flip about them. (Don't get me wrong, they where and are great receivers.), but just don't have the velvet feel because of the digital dial and God knows how many gears that beast has to turn.Now, as I have said before, I had a National

NC-60 when very young and it appears no one at least on this list has one for sell or trade. So I would like to find a NC-183 or D. Anybody got one that they would part with? (reasonable)

Your Friend Al
fritsche@msn.com

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: Ronald Steinberg <rhstein@interaccess.com>
Subject: Re: Any BAs at RadioFest '96 in Elgin IL?
Message-ID: <199608270923.EAA13828@psycfrnd.interaccess.com>

At 03:34 PM 8/26/96 -0500, you wrote:

>Greetings,

>

>I'm thinking of going to RadioFest '96 in Elgin, IL

> I would like to know if this is a

>good event for a BA enthusiast to go to? Does anyone have any

>experience with this event?

>Tom

>tjkelly@apk.net

This is a very interesting eventstrange ham gear always seems to show up.....missed a rare 75s2 for \$100 last year

Jack (K0EWU) will be setting up the fence tomorrow and I will be working on the PA and video gear in the afternoon

Many hams are in this group.

See you in the hotel lounge after 5

Ron Steinberg	K9IKZ	rhstein@interaccess.com
	512 S Cherry	Itasca IL 60143
	630 773 3583 hm	630 773 0822 hm fax

At work:	rentcom@mcs.com	http://www.rentcom.com
	847 678 7000 wk	847 678 9378 wk fax

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Clark Fishman (FSAC) <cfishman@PICA.ARMY.MIL>

Subject: Armstrong

Message-ID: <9608271407.aa17811@COR6.PICA.ARMY.MIL>

The Major Armstrong ARC has there meetings in the building where Armstrong had a lab and station in Alpine, NJ....it sure is neet to look into the lab area...

Clark Fishman WA2UNN cfishman@pica.army.mil

The Armstrong tower is loaded with antennas...a prime spot overlooking the Hudson River on the New York skyline...

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996

From: terryo@wort-fm.terracom.net (Terry O'Laughlin)

Subject: Back from the shadows, again.

Message-ID: <199608280201.VAA12315@mendota.terracom.net>

Greeting fellow anchorites. I have returned from the Lewis and Clark trail. I bear a new e-mail address.

Please don't tell me about all the fun I missed. I missed it all out west as well. I heard horror stories about bids three times the old rate by people shipping the good old government surplus overseas. Korean companies were mentioned several times. (I guess it is cheaper to recycle equipment when you don't have to dispose of the leftovers in an environmentally sane manor.) I saw piles of FAA and Bonneville Power Admin. surplus, but very little of Uncle sam's finest.

I'm surprised this is legal. I mean, imagine the Korean military with a pile of R-390As and CV-157s. Those rigs could heat the cold war up all over again.

I also hit a few retail places, R5D3 (nice guy, nice place), Cascade (enough parts to choke a horse), Electronic Dimensions (err, no thanks, not at THAT price)... You guys on the coasts don't know how lucky you are. There isn't a store that compares to any one of those three within 500 miles of here.

Finally, I think a national holiday for Howard Armstrong is a great idea. He plays a mean fiddle. I love the old Flying Fish release "Martin, Bogan, and Armstrong." Too bad his brother Edwin gave up music to play with radios.

73 Terry O' WB9GVB

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996

From: "Thomas A. Adams" <103360.2133@CompuServe.COM>
Subject: Bendix RA-1B User's Report
Message-ID: <960827054245_103360.2133_JHL85-1@CompuServe.COM>

Greetings, Troops!

Well, I've had a chance to play with my newest boatanchor for a few days now, and it's time to tell how it operates.

In a word, GREAT!!!

Anyone who operates and likes the BC-348 would LOVE the RA-1B. The best way to describe the performance is to say that it's like a souped up version of the BC-348. At the same time tho, it has the same shortcomings as a 348, plus a couple of it's own.

The front end of this radio is HOT! It blows the BC-348 away, especially in the area of noise figure, which in and of itself means greater sensitivity. Most likely reason for the better performance is simple; the 1st detector (ie, mixer) of the 348 is a pentagrid converter (notoriously noisy), while the RA-1B uses a separate mixer and conversion oscillator. There's just no comparison in the improved performance.

I haven't done an alignment job on the RA-1B yet, tho it's so simple a radio that I could do so without the manual. It doesn't seem too far out of the ballpark as it stands, so alignment can wait awhile.

The RA-1B has a bit of an idiosyncrasy. It will work OK on a lo-Z, coax fed antenna, but it's real personality only comes through with a hi-Z, single wire feeder, tied to a random wire, Window, or the like.

Dial calibration is pretty good, but with BOTH radios it's a good idea to keep a well warmed up BC-221 handy!

In the range of 150 - 540 KHz, the RA-1B has sensitivity to burn! Side by side with a 348, it steals the show. GWEN transmissions are loud enough to block the front end, and this evening it hauled in TUK (194 KHz) well enough to read the AM audio; the 348 couldn't. Used with a good loop, this rig is going to be a pretty fair aviation beacon hunter, as well as a decent receiver for chasing LOWFER beacons (the BC-348 needs front end modifications to even consider LOWFER hunting).

The 348 has lost it's job of monitoring 500 KHz maritime calling / distress frequency; the RA-1B does a MUCH better job! Stations that only produce a muffled, unreadable grumble on the 348 produce readable CW on the RA-1B. This evening, CLA, Havana Radio, was copied 100%; the 348 couldn't even come close to cutting it.

The rig also makes a deadly hunter for AM broadcast band DXing, once again with a loop, or with a long wire. The IF bandwidth seems about optimum for that kind of work, and with an old Army LS-3 loudspeaker (with external matching transformer) the audio response and distortion figures are amazingly good, once again outclassing the 348. Further, this thing has a LOT more audio wattage than ANY stock BC-348 (puny audio gain and output has always been a BC-348 shortcoming). AVC action is only fair, tho that may be a bad capacitor in the buss (remember, this is a 50+ old radio!). On the broadcast band, better audio distortion figures could be had by switching off the AVC and varying the volume control (which, incidentally, I'm convinced is REALLY an RF gain control in disguise!).

Above the broadcast band, I was pleasantly surprised to find that SSB reception is EXCELLENT; it almost acts like it has a product detector! SSB is even easier to tune on the RA-1B than it is on my R-390A! The BC-348 isn't even in the running on this score. The fact that there is no BFO pitch control is, surprisingly, not significant on SSB; main tuning does it all, either sideband.

Which brings us to a negative point of the RA-1B. CW reception is good, but with that wide IF bandpass (and no controls to narrow it) I'd hate to have to work a pileup with this rig! In crowded band conditions, this is a radio that demands a seasoned CW operator who knows what s/he is doing; ie, you've gotta have the "tunable eardrums" option installed in your head, 'cause that's the only selectivity you're gonna get! For the wusses among us, a headset and an FL-8 "beam filter" help out a good bit!

Image rejection is excellent, better than BC-348, due to a higher IF frequency in the RA-1B (somewhere between 1500 and 1800 KHz; I haven't gone poking around yet to find out exactly what it is).

Electrical stability is excellent; New York Radio / Gander, Newfoundland's SSB VOLMET broadcast on 10 MHz, once tuned in, STAYED tuned in for 2 hours without any tweeking necessary, after a 30 minute warmup.

Machanical stability is good, but not what I'd expect on Band VI (7.5 - 15 MHz) from a radio that was designed and built for installation aboard a piston aircraft. Things MIGHT be a bit better if I had the shock mount, but I can't say for sure. Once I get a manual, I can hopefully fabricate a reasonable facsimile of the original.

Both RA-1B and BC-348 suffer from the lack of a GOOD noise blanker circuit; the RA-1B suffers more because of that hot front end. This evening, listening below the AM broadcast band gave me a good ringside seat for thunderstorms that are as yet 500 - 750 miles away.

I dearly love my BC-348s and would never consider parting with those old classics, but I'm absolutely convinced that Bendix had a MUCH BETTER idea.

73's,

Mr. T., K9TA

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Re: Bendix RA-1B User's Report
Message-ID: <Pine.ULT.3.95.960827083950.125A-1000000@admin.aurora.edu>

On Tue, 27 Aug 1996, Thomas A. Adams wrote:

> Well, I've had a chance to play with my newest boatanchor for a few days now,
> and it's time to tell how it operates.
> In a word, GREAT!!!
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> of the 348 is a pentagrid converter (notoriously noisy), while the RA-1B uses a
> separate mixer and conversion oscillator. There's just no comparison in the
> improved performance.

Tom, etc.... Maybe you don't want to do this to a 348 but there is a mod
to convert the 1st RF amp from triode to pentode operation (this may
depend on the model - I'm not sure). But I did it to my 348Q and, while I
don't have any hard figures, it performs well after the mod. The mod is
simple and can be done in just a few minutes.

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: steve@hi.com (Steve Byan)
Subject: Re: Bendix RA-1B User's Report
Message-ID: <v0213050eae48d2185c49@[140.243.30.128]>

Tom, thanks for the user's report on the RA-1B. A couple of questions:

What's a RA-1B? I don't recall seeing it in Moore's book. I gather it's a military aircraft receiver. Is it WWII vintage or later?

Tom, would you please offer a brief description so that we might recognize one if we see one at a 'fest?

Thanks,
-Steve

Steve Byan	internet: steve@hi.com
Hitachi Computer Products (America), Inc.	
1601 Trapelo Road	phone: (617) 890-0444
Waltham, MA 02154	FAX: (617) 890-4998

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: Merv Schweigert <k9fd@htc.net>
Subject: Brake
Message-ID: <9608280107.AA04640@ns.htc.net>

There were some postings about bending brakes to form chassis and boxes, and one was offered for sale here also. Today I checked a few tool companies and Enco has a small brake 18inch wide, bends 16 guage material, for 25 bux. It was in thier sale flyer, they also have a very nice brake that has removable fingers for forming boxes etc, for 265 bux. They sell small shears and other metal forming machines if someone is interested in getting in the business. Harbour freight also has some similiar equiptment. F, Y, I,
73 Merv

```
*****
* Merv Schweigert           Key Collector, Paddles, Bugs, Straight Keys *
* 9694 S. Prairie Road                      *
* Red Bud, Ill 62278           Looking for Keys and code/telegraph Items.. *
* 618-282-3953 Voice                      *
* 618-939-FAXX Fax           Appreciate any calls or leads..... *
* k9fd@htc.net E-mail                      *
*                               K9FD Know Code                      *
*****
```

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996

From: spr@earthlink.net (Scott Robinson)
Subject: Capacitor types and uses, a repost by request
Message-ID: <v01530507ae47e3863b7a@[153.37.85.67]>

I'm reposting this because of a question posted about capacitor use, care, and feeding (what DO they eat?). There's a lot to know about capacitors.

Ceramic and mica (or silver mica) capacitors are best for high frequencies because their dielectrics don't get lossy and otherwise weird at those frequencies.

Ceramics come in two basic flavors: Z5U or X7R material, and NPO or COG material. The former gives you a lot of lossy, non-linear non-temperature-stable capacitance in a small space. The latter gives good temperature stability, linear behavior, and isn't lossy but is several times larger. Micas and NPO ceramics are reasonably equivalent.

Paper capacitors have now been replaced by plastic dielectrics such as mylar (polyester), polypropylene, and polycarbonate. Most common is mylar.

Paper is not a well-behaved dielectric at high frequencies, and as we have all seen deteriorates over time to become leaky. Unless you are using them as frequency determining components in a tuned circuit or are doing picky audio applications, all of these plastics work about equally well. The polypropylene, polycarbonate, and (best of all, but don't overheat it soldering!) is polystyrene. These materials exhibit predictable temperature coefficients, low dielectric loss, and "dielectric storage", and excellent linearity. You can create a nearly zero temperature coefficient capacitor by paralleling equal values of polyprop and polycarbonate.

Electrolytics are polarized and not very perfect capacitors, but can't be beat in terms of Farads per cubic cm or per \$. Tantalums are more perfect capacitors but cost more and must be protected from peak currents; their failure mode is to short out-HARD! and this can smoke other parts. Their leakage currents are no longer lower than contemporary aluminum 'lytics, and their reliability is if anything a little worse.

Note that although electrolytics don't like to be operated at voltages 'way below ratings, this limitation does not apply to any other type of capacitor.

More questions, ask!

73's

Scott Robinson
spr@earthlink.net
"Wait'll he puts on his stereo headphones..."

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: "Benjamin D. Hall" <bdhall@ghgcorp.com>
Subject: CRYSTAL TEST OSCILLATOR
Message-ID: <32239C95.6BF4@ghgcorp.com>

Okay fellow fine firebottle fanatics, this is my first attempt at
ascii schematic work, so no laughing!

Judging by the 20 or so e-mails I got, I figured this would be
appropriate to post to the list. Feel free to put it into web pages, Ba
archives, whatever, but please give credit to Mr. William L. Smith,
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It is from Hints And Kinks, Volume VII, page 105.

"The circuit shown [below] was circulated among MARS members recently.
[editors note: recently is 1965, 8 years before yours truly was born!]
It will oscillate with any good crystal having a fundamental frequency
between 3 and 20 Mc. No tuning is necessary. The output is sufficient
to be heard in a receiver or to be measured with a frequency meter.

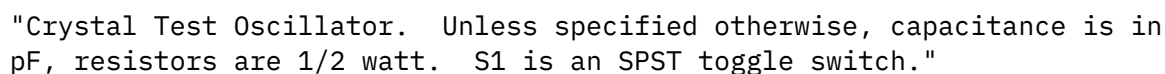
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With a little care, the parts for this unit can be mounted on a 1 1/2 x
2-inch peice of electronic pegboard, such as Vector Terminal Board type
32AA9, and the whole works squeezed into a Bud CU-3016-A (4.25 x 2.25 x
1.5 inch) minibox.

By William L. Smith, W3GKP"



73,
Ben
--

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: "B. D. Hall" <BDHall@ghgcorp.com>
Subject: Crystal Tester, who wanted one?

Message-ID: <32234057.781E@ghgcorp.com>

Greetings from a wet Johnson Space Center y'all... (as I happily munch on my salad... mmmmmm good)

A while ago, someone was looking for a way to test crystals. Gerald D'Entremont loaned me an old ARRL Hints and Kinks and I was reading it last night and stumbled across a schematic for a little crystal tester. You plug in the xtal, turn it on, and tune a nearby receiver for zero beat if I remember correctly, and bingo, there is your frequency. It's silly-state, but I think it could be made tube fairly easily... I think I'd also mod it so that I could put a freq counter on it too when I build it... (I have about 100 so odd crystals banging around, mostly odd values to test)

Whoever was interested, please e-mail me, I'll send you a photocopy...

73,
Ben

--

* Benjamin D. Hall, Houston Texas *
* BDHall@GHGCorp.com BHall@GP802.jsc.nasa.gov *

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: "B. D. Hall" <BDHall@ghgcorp.com>
Subject: Crystal Tester, wow 4 e-mails in 2 minutes!
Message-ID: <32234D0E.44BA@ghgcorp.com>

Hi Folks, got 4 e-mail replies in the past two minutes about the crystal tester circuit. To save postage and mailing, I am going to try and make an ascii art version of the schematic for distribution via the list or e-mail. If that doesn't work, I'll draw it up in bmp format.

If all fails, I'll make photocopies and mail...

Thanks and 73,
Ben

--

* Benjamin D. Hall, Houston Texas *
* BDHall@GHGCorp.com BHall@GP802.jsc.nasa.gov *

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: spr@earthlink.net (Scott Robinson)
Subject: Curing warped dials
Message-ID: <v01530502ae47dd5fc97e@[153.37.85.67]>

Folks,

I have had some success flattening warped dials with gentle heat. First you need the dial off the radio, so that you can compress it between two surfaces to hold it flat.

Now, using a heat gun or hair dryer, GENTLY (start with a foot between the nozzle and the dial and wave the heat gun around so it never spot heats the dial) heat the dial, testing if from time to time to see if it's getting a littel pliable. As soon as it does, heat it just a little more and clamp it flat.

Even a little too much heat may have disastrous consequences. Proceed with caution. This procedure is done at your risk. Whether it works or not depends on many factors, particularly on the type of plastic involved.

To fix the edges, you could try laminating a piece of carefully cut new clear stuff on the back so it can engage the drive wheel.

Regards,

Scott Robinson
spr@earthlink.net
"Wait'll he puts on his stereo headphones..."

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: Eugene Rippen <soundval@foothill.net>
Subject: Drake FS
Message-ID: <322264B6.13AB@foothill.net>

For Sale:

Drake: R4B, T4XB and AC4. The R4B and the AC4 look good and work.
The T4XB looks good, looks complete, has good finals, but is not working. Have manuals for the R4B and the T4XB. All for \$225.

Note: From yesterday's list the following items are sold:

EMC 202
Superior 650
Micronta 21-522
Bencher Paddle
RCA WV-87A

Eugene Rippen
105 Donnington
Auburn, CA 95603 soundval@foothill.net

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: william wiggins <bwiggg@worldnet.att.net>
Subject: Eico 635 tube tester SOLD
Message-ID: <19960827174052.AAB4906@LOCALNAME>

The Eico 635 tester has been sold to a fellow list member

thanks,

Billy

Billy

Bwiggg@worldnet.att.net

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: w5tvw@juno.com
Subject: Re: ELEC. CAPS / CAP TYPES / RATINGS
Message-ID: <19960826.215355.8127.0.W5TVW@juno.com>

The 'electrolytic' capacitor is quite a different animal from the well known paper/mylar/mica types.

I can't quote the source at the moment, Maybe Barry Ornitz or someone else might have the text it comes from. Generally electrolytics should be run at or slightly under the "rated" voltage. I.E.: In an old "All American 5" AC/DC set use 150 or 160 volt ratings. If you have a power supply that is delivering about 300 volts, use a 350 or 450 volt rating. If you have a low voltage application, say a decoupling cap for a 12 volt supply, use a 15 or 16 or 25 volt rating. The electrolytic will not form properly or the capacity will deviate from the rated value if, say you use a 450 v. cap. in a 50 or 100 volt circuit.

The old paper dielectric or their modern mylar counterparts are

entirely different. It is perfectly safe to use say a 1000 volt cap in a 12 volt circuit (if you can stand the larger size!) The dielectric is not affected as is the electrolytic capacitor. The dielectric consists of a very thin film of oxide on the aluminium electrodes "formed" by the voltage impressed on the electrodes or plates. Polarity MUST be observed when they are connected. (Except special 'non-polarized' types...rare.) On the paper/mylar/polystyrene/mica/ceramic types, there is no polarity. There IS an "outside foil" marking on some types, but this has nothing to do with ACTUAL positive or negative polarity. Generally, in the past, paper/mica caps were installed in a radio rated slightly higher than the highest expected voltage in the circuit. Since they came generally in 200 volt increments (200, 400, 600) you will find things like 400 volt caps commonly in BA receivers that were transformer operated and 200 volt caps in AC/DC receivers. If you replace with mylars, I'd stick with 630 volt ones (this seems to be a popular rating nowadays). The newer caps are very small compared with the paper types they replace, so they should fit into the most compact BA receiver out there.

Mica types like the old "postage stamp" mica cap and the newer epoxy 'dipped' micas are generally used where a high order of stability in capacitance value is required, such as any resonant circuit. Mica and "disc" ceramic types also have inherently lower residual inductance than paper/mylar types and make better "by-pass" and "coupling" capacitors at VHF and UHF frequencies. Generally "disc" ceramic capacitors (with some exceptions) are not suitable for use in "resonant" circuits, they are primarily for coupling/bypass use. There are other ceramic "tubular" and "doorknob" types that are used in resonant applications however.

I hope this clears up a few things and has prompted those interested to read Terman's "Radio Engineering", or Langford Smith's "Radiotron Designer's Handbook" on the subject.

73,

Sandy Blaize, W5TVW

Boat Anchors collected, restored, modified, traded & used!

w5tvw@juno.com

417 Ridgewood Drive,

Metairie, LA., 70001.

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996

From: "D.D. Todd" <dube3@n-link.com>

Subject: Re: Flap on R-390A Veeder Root Counter

Message-ID: <32235676.6B9D@n-link.com>

Tom Kelly wrote:

>

> Greetings,
>
> My new R-390A has a flap permanently mounted over the Veeder Root
> Counter. Whenever I want to see the frequency, I must lift the flap to
> view the display. I'm curious, I've never seen this before. What's its
> purpose? Was it common or unusual?
>
> Thanks,
>
> Tom Kelly
> Novelty, OH
> tjkelly@apk.net

Sounds like it may have at one time been in use in classified operations,
where the frequency being monitored was "classified".

--

73,

Dube Todd

K4DWW

dube3@n-link.com

"The wear on a hypothesis is proportional to the distance between the
extrapolation and the experimental results."

-unknown

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996

From: merrigan@ee.ualberta.ca

Subject: Re: Flap on R-390A Veeder Root Counter

Message-ID: <199608272304.SAA25825@uro.theporch.com>

WHICH: <32235676.6B9D@n-link.com>

WHEN: 08/27/96 at 01:18 PM (SystemDate:MDT)

WHO: "D.D. Todd" <dube3@n-link.com>

WHAT: Re: Flap on R-390A Veeder Root Counter.

I say:

>Tom Kelly wrote:

>>

>> Greetings,

>>

>> My new R-390A has a flap permanently mounted over the Veeder Root
>> Counter. Whenever I want to see the frequency, I must lift the flap to
>> view the display. I'm curious, I've never seen this before. What's its
>> purpose? Was it common or unusual?

I have one of these too (I think it is in my R390A spares box). If I

recall correctly it has a piece of felt on the back to protect the readout's glass.

Shaun

--

merrigan@nyquist.ee.ualberta.ca
Electrical Engineering Student
University of Alberta
Edmonton, Alberta, Canada

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: Flattening Warped Plastic
Message-ID: <Pine.ULT.3.91.960827191244.3617A-1000000@dua150.kpt.emn.com>

On Mon, 26 Aug 1996, John Sehring suggested a method for flattening warped dials and other plastic items. The problem is that there are so many plastics that were used.

> Get two nice thick pieces of glass larger than dial. Sandwich dial between
> glass pieces. Place enuf weight on top of sandwich to give some pressure
> on dial. Put in an oven that has an *accurate* thermostate. Set to
> about 130-150 degrees & bake for a few hours. Take out sandwich &
> weight and let cool with weight still on top. Works FB. Repeat if necessary.
>
> Only caution is plastic material vs. baking temperature, don't overdo it!

I like John's technique but the needed temperature may vary by material. Basically you have to heat the plastic to above its glass transition temperature but not so hot that it melts. I cannot stress John's comments about ACCURATE temperature control enough.

My best GUESSES as to the most COMMON materials and their glass transition temperatures are as follows.

PMMA (polymethylmethacrylate, Plexiglass, Lucite - 220 F
105 C
clear and quite tough)

PVC (polyvinyl chloride - depends on plasticizer, 180 F
82 C
common insulation plastic but translucent or opaque)

PS (polystyrene - quite clear but brittle) 212 F
100 C

PET (polyethylene terephthalate, Mylar - modern soft 160 F
71 C
drink bottles are this, solvent resistant)

PC (polycarbonate - very tough, modern CD's, not 293 F
145 C
likely in BA's)

Nylon (different polyamides - often used as gears) 120 F
50 C

Cellulose Esters (cellulose acetate, cellulose nitrate, 120 F*
50 C*
celluloid - very old, likely yellowed or brown
with age)

(*) and higher depending on plasticizer, moisture content and crystallinity.

The cellulosic plastics were used extensively in the 1920's and 1930's.
They tend to become discolored with age and also become very brittle.
Placing a moist paper towel under them may help when they are heated to
keep them soft. Be careful as the moisture may remove dial markings.

Identifying which plastic is which is often no easy task. I had to have a
friend run an infrared absorption scan to identify a sample sent to me by
Stan Griffiths once - it was a polyacetal used in some scopes. To be
safe, start with the lowest temperatures possible when trying to
straighten a piece of plastic. Remember, I am not responsible if you
guess the wrong material and destroy it!

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: bowes@ibm.net
Subject: FP Electrolytics Available
Message-ID: <9608270500.AA0016@localhost>

Hi y'all,

I recently bought a box of about 60 NOS multi-section FP style caps in various voltages and capacitances. I have gone through the entire box and have managed to rejuvenate about 50 of the original 60 using my old Heathkit IT-28 do-it-all capacitor machine. Most of the caps are in the 300-450 volt range with a few of lower values. Since I don't need all 50 of them I am willing to make them available to other BA enthusiasts for a few bucks and shipping. Let me know what you need and I'll scrounge the batch to see what I can come up with.

Tom Bowes
KB8NDS

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: aa4rm%amos@mathcs.emory.edu (AA4RM's)
Subject: Re: Frederick Alston Terman and his legacy
Message-ID: <9608270224.AA05568@amos>

Barry et. al.

The AWA Review, Vol 6 - 1993, has a paper by Bill Orr W6SAI & a Colleague on the Federal-MacKay story.

They give a lot of credit to Terman being the top ringleader in the late 30s circle that included Packard, Hewlett, the Varian Bros, etc.

But a Federal Radio man named Cyril from the teens is their award winner for catalyzing Silicon Valley.

Federal built the huge Poulson Arc transmitters that were the mainstay of w-wide pt-2-pt thru the mid-20s. These things had a hydrocarbon-immersed arcs in a mag. field coupled to a tuned ckt to do CW b4 tubes! Full physics a mystery to this day!!

Federal cast up some 1MW magnets that were never used & later were donated to Stanford & UC-Berkley. Lawrence used the magnet poles in his 1st cyclotron. A jokester physicist ground the last letters off so today it says FEDER today rather than FEDERAL - suggested as 'light as a feder (deutsch feather)'

Those pole piece are garden sculpture @ Berkley today!

0/0

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: "Ray Perrin" <ray@pwgsc.gc.ca>
Subject: Hallicrafters 6H6
Message-ID: <vines.+lw7+Zsh6mA@otts24.ncr.pwgsc.gc.ca>

Gang,

While going through a batch of recently acquired tubes, I found a 6H6 carrying the Hallicrafters brand. While there is no box, the tube looks and tests new. I have no Halli equipment and it seems a shame not to use it in a Halli.

So, here's the deal. I will gladly give the tube to any non-dealer who needs it for a Halli -- I will even pay the postage. Please send an e-mail to me with your name and address. Please also tell me in what Halli radio you will use it.

Once again, if the tube will just sit in a junk box, it might as well sit in mine. But if you need it for a Halli, it's yours.

73,

Ray Perrin, VE3FN
ray@pwgsc.gc.ca

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: Robert Nickels <ranickel@mwci.net>
Subject: Re: Hammarlund Dials
Message-ID: <32224CF3.7C0C@mwci.net>

Rick Blank wrote:

>

```
> Maybe you could try one of the tricks that used to be used to
> straighten warped LP's, back in the good ole' days pre-cd, that used
> to be touted:
```

I picked up a couple of old Radio and TV special issue magazines published by Popular Science magazine back in the late '40s at the hamfest Sunday. There was a tip that might work - it showed how to straighten a warped record by placing it on a rotating turntable located under a heat lamp. It might work with the dials, keeping the heat uniform across the plastic surface.

Good luck!

Bob KEOT
ranickel@mwci.net

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: George Humphrey <gah@topher.net>
Subject: Heathkit Manual
Message-ID: <199608271925.0AA03109@mail.topher.net>

Hi,

I am looking for a copy of the Heathkit manual on their Vectorscope Model
I0-101. Be more than happy to pay for copy and postage, etc.

Thanks, George

George Humphrey	****Every day you wake up****
gah@topher.net	**** is a GREAT DAY ****
Emory, TX, USA	**** Be Happy and Smile ****

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: steve@hi.com (Steve Byan)
Subject: homebrew key and code practice oscillator
Message-ID: <v02130500ae491146e3e3@[140.243.30.128]>

I've put copies of some projects from the "How to build code-practice
apparatus" chapter of Arthur R. Nilson's "Radio Code Manual" up on the BADX
web-site. The homebrew key is at
<<http://www.grove.net/~badx/boatanchors/key.html>> and the code-practice
oscillator is at <<http://www.grove.net/~badx/boatanchors/cpo.html>>.

The mechanical drawing for the key is pretty muddy due to low resolution.
I'll try to get a 300 dpi postscript version of it up for those who
actually want to build one, or write to me with an SSAE and I'll send you a
paper copy.

Regards,
-Steve

Steve Byan
12 Oak Ridge Road
Littleton, MA 01460

internet: smb@world.std.com
phone: (508) 486-4241
FAX: (617) 890-4998

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: Lrware@aol.com
Subject: HQ-150 Hammerlund
Message-ID: <960827194657_511142854@emout13.mail.aol.com>

OK Guys I need a favor...

I have a line on a working HQ-150 with matching speaker.
Comments on a fair price for this, comments on how
well they work, comments on how rare or common they are,
etc. etc. etc.
Would all be very welcome if e-mailed to:
lrware@aol.com

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: k7yha@juno.com (Richard H. Arland)
Subject: HQ-170AC Restoral
Message-ID: <19960827.213520.4447.1.k7yha@juno.com>

Gang:
Just when you thought you were going to stop hearing horror stories about
Hammerlund's.....

Picked up two HQ-170ACs at the York (PA) fest two weekends ago. One was
"working" (a highly subjective term, I found out) and the other was a
parts radio. I got the "working" 170 to actually hear ham QSOs by
replacing the 6C4. 160, 20 & 15 meters were dead but 80, 40 & 10 played
fine, although a little rough due to noisy pots, corrosion on the
bandswitch, etc.

Took the first steps in restoration today. Took the parts radio apart cuz
it had the better of the two front panels. Using shampoo and water, I
cleaned all the gunk off of the front panel and thoroughly rinsed it off
with water. I then tried some Baker's Nonequal Old Brass Polish (Baker
Industries, 13 Railroad Ave, Paoli, PA 19301) on a small section of the front
panel. This stuff brought up the luster of the paint and DID NOT
remove any silkscreened lettering. The entire front panel then got a
good application of the brass polish and rub out. The results are
spectacular! The front panel looks 1000% better than when I started. The
metal luster is back and the grime that infiltrates the brushed aluminum
trim around the outside of the front panel bezel is bright and shinney.

The dial/meter bezel on the working 170 was the better of the two, so
that got a treatment much like the front panel with similar spectacular
results. While neither the bezel or front panel look new, the certainly

look much better.

Meter and clock plastic faces received a treatment of 1/2 toothpaste and 1/2 baking soda applied as a paste using a clean cotton undershirt. This buffed the scratches out of the surface of both pieces of plastic. The clock was cleaned up along with the meter dial and now both units are fit to reinstall in the reconditioned front panel.

The chassis was the real bummer. It looked like this radio was stored near a coal stove and some of the soot or coal dust had deposited onto the top of the chassis. Once there, moisture did the rest. Deep corrosion of the chassis is being removed ever so slowly using a commercial cleaner/disinfectant applied by a toothbrush, rubbed with a soft cloth and removed. This is followed by an application of the brass polish to remove the deep corrosion. Finally, a layer of Future 2001 car wax is applied over the chassis to seal the chassis from further moisture and corrosive action. While this is not the best way to do things, it, for me is the most expedient and yields excellent results. Purists would, of course, strip down the entire chassis and proceed with corrosion removal. However, since this radio is not going into a museum and is not in that "excellent to mint" condition in the first place, I deemed it in appropriate to spend excessive time on degunking the chassis.

One problem has arisen. The plastic calibration dials that sit between the dial bezel on the inside of the radio and the movable frequency dials are badly warped on one receiver. I am using the calibration dials from the parts radio, but would like to flatten the other set out for future use, incase I ever want to restore the parts radio. Being plastic, they will probably respond quite well to the "place them between two pieces of glass, weight the top piece down and heat in a convection oven at 130-150 degrees for a couple hours" treatment. HOWEVER, these plastic dials are held on an aluminum bar with VERY tiny rivets. If I remove the rivets, I can flatten the plastic dials, no problem. How do I reattach the dials to the aluminum bar? Any suggestions?

Tomorrow will be toob checking day. Maybe even get a chance to fire up the rig and do a quick ops check prior to alignment. All is going relatively smoothly, which is why I am really getting paranoid.

73 rich K7YHA

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Bob Marsh <bmarsh@hicom.net>
Subject: HW-16 Restoration
Message-ID: <322304DE.6157@hicom.net>

Hi All,

I'm in the process of restoring an HW-16 (my first restoration attempt). The manual I got with the rig is a W7FG reproduction, but is incomplete. Does anyone have either an original manual, or clear copies of the top & bottom chassis illustrations, location of components, test points and any other info? Since I'm not all that well versed in electronics yet, I need all the "show and tell" I can get! I'm planning on following this project up with an SB-301/401 restoration, and then maybe I'll take on the R-390A alignment that's been giving me nightmares!

One of these days I'm gonna figure out what's going on inside these things. What I lack in knowledge, I make up for in tenacity (or is that obsession?).

73 de Bob/KB2SGM

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Pete McCollum 27-Aug-1996 0851 -0600 <mccollum@ssdevo.ENET.dec.com>
Subject: IFF / Mark IV
Message-ID: <9608271451.AA10113@us3rmc.pa.dec.com>

Attention William Donzelli: I just tried to send privately to you at integrat@usr.com, and it bounced saying "user unknown".

Is the "Mark IV" that you mentioned a British version of the ABA-1, or is it something different?

Pete

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: integrat@usr.com (Integration Area)
Subject: IFF a'plenty
Message-ID: <222319C0.3000@usr.com>

This is a Mime message, which your current mail reader may not understand. Parts of the message will appear as text. To process the remainder, you will need to use a Mime compatible mail reader. Contact your vendor for details.

--IMA.Boundary.427101148
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit
Content-Description: cc:Mail note part

OK, so I have to shoot the cc:mail guy in the face with a bazooka again. If a message of yours has bounced, try again.

The Mark system for IFF was British, but we used it as well. Mark I was VERY crude, and (I think) only worked with the Chain Home stations. Mark II was a slightly better design that could deal with various British radars (we made a few ABD and SCR-535 (for Mark II) sets as well, but mostly just used borrowed British equipment). Mark III was also a British system that eventually became the standard Allied IFF. Mark IV (ABA-1 and SCR-515) was a U.S. Navy design, but in keeping with the system in use, was allocated a "Mark". The final design of the series, Mark V, as a United Nations design, and saw service during the Korean War years. After that, the Mark system went to pot, when Mark "X" (for experimental) became Mark X, then Mark XI, Mark XII, and so on.

The BC-727 (and nearly identical BC-767) are alarm boxes for various IFF sets. The lights are redundant, and holes are drilled where needed.

William Donzelli
integrat@usr.com
--IMA.Boundary.427101148--

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: Bob Roehrig <broehrig@admin.aurora.edu>
Subject: Johnson Desk KW
Message-ID: <Pine.ULT.3.95.960827205006.5038C-1000000@admin.aurora.edu>

Thanks to all of you that responded to my question about the plate transformer ratings. Let me tell you about this particular amp. I bought it for \$100 from the fellow that bought it new in 1957 from Newark for \$1500. I've had it for about 15 years. Now, you purists that don't want to hear about modifying things, delete the rest now.

The original owner had already replaced the rectifiers with commercial solid-state plug-in replacements. I converted the unit to grounded-grid. The modulator and screen & bias supplies are gone. I added a control chassis, with time delays & assorted relays and all relays that switch power are 30 amp mercury jobs. The amp circuit itself is pretty common - ala Bill Orr's article. It has a "T" network tuned input. The original 4-250's were replaced with 4-400's.

It worked like a champ, however I was not pleased with the low 2500 volt plate supply. I removed the original cap (choke input type circuit) and installed a pair of 12uF @ 500 volt jobs in a PI filter arrangement.

Plate voltage under load is now 3800V. I realize that this is above the normal ratings, but I once was chief engineer at an FM station that ran 3825 volts and the same tubes were in there for a year and a half with no

drop in output (16 hours a day).

It now cranks out as follows: Serial No. 100492

P drive = 90 watts (These readings taken on 20 meters)

Ep = 3800V

Ip = 450ma

Pin = 1710 watts

Ig = 150ma

Isg= 100ma

Iout(rf) = 5 amps into 50 ohms = 1250 watts

These are steady-state readings.

The air system has been beefed up with a squirrel cage blower into the RF deck and Eimac chimneys on the tubes.

This thing performs well even on long RTTY transmissions.

E-mail broehrig@admin.aurora.edu

73 de Bob, K9EUI

CIS: Data / Telecom Aurora University, Aurora, IL

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996

From: Hans Jense <jense@eos.arc.nasa.gov>

Subject: Looking for BC-779 manual

Message-ID: <199608272118.0AA18302@eos.arc.nasa.gov>

Dear listmembers,

a couple of weeks ago I posted a request for information on how to identify my newly

acquired Hammarlund SP receiver. With the help of several of you, including our resident Hammarlund Historian, as well as Moore's book I was able to ascertain that I

have in fact a BC-779, i.e. the military version of the SuperPro 210LX. The cleaning

up of this beast is progressing quite nicely. The chassis is now clean except for that certain "patina" that identifies the real boatanchor (IMHO). I removed all the

paint from the front panel and am now preparing it for a respray, to be followed by

the restoration of the lettering. As the nomenclature tag on my receiver is gone, I'd

like to fabricate a replacement, possibly by photo-etching, based on a clear picture

of the original thing. In addition to this I'd like to get technical documentation,

preferably an original manual. Before I turn to "commercial" sources, such as Fair Radio, Tannenbaum, Bob Fowle, or W7FG, I'd like to ask this community if someone

might have such a manual that he or she no longer needs. Thanks for your help.

-- Hans

=====

Dr. G. J. Jense
Senior Scientist, Virtual Environments
Command & Control and Simulation Division
TNO Physics and Electronics Laboratory
The Hague, The Netherlands

Currently on leave at:



Spatial Perception and Advanced Displays Lab
Human and Systems Technology Branch
Flight Management and Human Factors Division

NASA Ames Research Center
Moffett Field, CA 94035-1000
Mail Stop 262-2

Phone: (415) 604-1877
Fax: (415) 604-3729
Email: jense@eos.arc.nasa.gov

=====

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: "Richard A. George" <wa6jox@rain.org>
Subject: manual needed
Message-ID: <Pine.SUN.3.94.960827141555.6264A-100000@coyote.rain.org>

I need a manual and schematic for a globe DSB-100 transmitter. Willing to pay what ever for original or copy. Thanks K6KWQ Dick

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: w5tvw@juno.com

Subject: Re: Manual needed for BC-639-A

Message-ID: <19960827.121817.8127.4.W5TVW@juno.com>

This receiver is sort of a tunable version of the receiver in the SCR-522 aircraft VHF radio. I have seen and used them many years ago. With the addition of a suitable pre-amplifier (6BQ7, 6CW4, 417A etc) they are very usable. I would, however, replace ALL of the black Micamold paper caps. They have a habit of failing a few at a time until they finally all "crap out". If you intend keeping it, go in one time, "shotgun" replace the Micamolds and you're through for a long time!

73

Sandy Blaize, W5TVW

Boat Anchors collected, restored, modified, traded & used!

w5tvw@juno.com

417 Ridgewood Drive,

Metairie, LA., 70001.

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996

From: Tom Wachtel <twachtel@i1.net>

Subject: Manuals

Message-ID: <3222F6CC.364@i1.net>

Hello Baers:

More recent finds have suggested that I scout the airways for additional technical information. Anyone out there have a manual for the following?

Johnson Ranger

Heathkit HW 101

As always postage and handling will be provided.

Thanks...

Tom KB0WUP

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996

From: integrat@usr.com (Integration Area)

Subject: Mark IV IFF

Message-ID: <2214B000.3000@usr.com>

You are basically correct about your IFF transponder...

The only things I might argue are that the Mark IV system was not discarded because of being obsolete, but rather for political reasons.

It actually was far more advanced than the British Mark III system. The British, wanting to keep their design, figured the interrogation and reply frequencies were too close to the operating frequency of the German Wurzburg gun-laying radar. A German radarman might discover the odd IFF pulses coming from Allied planes, thus breaching security. For this reason, the technically excellent Mark IV system was shelved for "backup" duty - although it may have seen very limited use in the Pacific theatre. Ironically, the Mark III system, working in the VHF range, was breached for nearly the same reason that killed of the Mark IV system. German operators learned to pick out Allied planes on their Freya radar scopes by looking for a large blip on the screen, which they called "flame".

Also, I think the destroyers were based around a thermite charge. A real "boom" type explosive might take out the pilot, but thermite would just leave the IFF box a lump of very hot iron slag. Mark II sets had a single, rather big charge - perhaps they had some bad experiences with them.

I am trying to get together enough data on the Mark IV system, perhaps for an AWA article (one of these days I will write something!). I have some data and equipment, but I am desperately looking for technical manuals (and artifacts!) for the Signal Corps RC-100 ground based interrogator, as well as Navy BE and BF (or BA/BB/BC/BD/BH, for that matter) shipboard interrogators.

Are there any other IFF nuts out there?

William Donzelli
integrat@usr.com

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: aa4rm%amos@mathcs.emory.edu (AA4RM's)
Subject: Re: Modulator question - 'effieciency,' douherty, et. al.
Message-ID: <9608271637.AA06261@amos>

Well switchmode modulation was never brought up here.

One of the 1st ever AM press exchanges wrote it up.

You saturate-bias the 'pass tube' on at 2x plate voltage for 25% of the time. Modulation results in filling the absent 75% of each switch interval with info based on incoming frequency & amplitude.

Switch intervals are of the order of 1/20khz & there's a big filter to swamp the switch transients so what comes out the back looks like a secondary of a mod. xfrmr.

Amazing what'll come down to avoid the past's engineering practice!

So what I'd always wanted to do was use one of the duty-cycle modulated pwr-supply switched p-s foundation ICs for the function generator.

Bet it'd work

Marty

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: "Thomas A. Adams" <103360.2133@CompuServe.COM>
Subject: More free manuals
Message-ID: <960827230344_103360.2133_JHL108-1@CompuServe.COM>

Greetings.

I've been weeding my overstuffed filing cabinet again, and found some more odd and eclectic stuff that I don't need anymore. They're yours for the cost of postage.

Once again, please don't get greedy; ONE MANUAL REQUEST PER MESSAGE! Anybody who sends a message requesting MORE than one will have his message bit-bucketted without consideration.

In the event of more than one request for a particular manual, the winner will be the message bearing the earlier's Compuserve timestamp.

TO 33A1-13-70-1 Operating and maintenance for the Dumont 304A and 304AR
 cathode ray oscillographs.

TM 11-527-15 Radio Receiving Set AN/URR-35C. This radio is a tunable
 225 - 400 MHz AM rig, with a crystal control option. I got
 this manual new from Consalvo several years ago. Radio's
too damned complicated, and has the sensitivity of a concrete
 block. WOOF! WOOF!

Hallicrafters SR-42A 2 metre AM transceiver

Hallicrafters HA-26 VFO

Knight Kit Wide Band Oscilloscope

Heathkit SB-620 Scanalyser

Heathkit AJ-15 FM Tuner

Heathkit B-1 Balun Coil

Heathkit HN-31 "Cantenna" dummy load

RCA BTE-10B FM Multiplex exciter and BTX-1A Subcarrier generator

"The Cathode Ray Oscilloscope" Radio-Craft library No. 20 (Copyright 1938 by Hugo Gernsback).

And, here's a couple for those that appreciate the REALLY oddball...

"Handbook of Maintenance Instructions for Radio Set AN/ARC-T1" A mimeograph booklet produced by Department of Technical Training, Truax Field, Madison, WIS. July,

1945

Operating and Maintenance instructions for RADIO RECEIVER TWO BAND (Battery
oper-
Minist-
Signal
THIS
ated) Model BP 2-A5. Made for the British
ry of Supply Mission through United States
Corps. Manufactured by Templetone Radio Mfg.
Corp. Betcha you've never seen a copy of
one before!!!

OK Gang, first come, first served! Come and get 'em!!!

73's,

Tom, K9TA

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Lynn Stolz <lstolz@tekelec.com>
Subject: Mystery MIL BA WHATIZIT
Message-ID: <3222EF10.794BDF32@tekelec.com>

Folks,

Here's an interesting item. It is called an "INDICATOR BOX BC-727", It is in an aluminum box, 2 inches square, with the front panel having two bayonet lamp holders inside. One of the lamp holders contained an NE-51 neon lamp. I assume the other one held another NE-51. The lamps have covers, one is red, on the left and the other is amber on the right. The two lamp holders are also wired in parallel.

Here's the kicker. There is no holes or wires or such that come out of this box.

Anybody know what this was used for?

It makes a great conversation piece here in the office.

If the NE-51's are excited by some strong RF field, then I don't think I'd want to be around it. Maybe this can be a benchmark for the new FCC EMF exposure regulations!

Lynn, N8AJ

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: w0ogh@ix.netcom.com (Larry Godek)
Subject: National Manuals
Message-ID: <199608270313.UAA09813@dfw-ix8.ix.netcom.com>

I received some manuals in the mail today from the left coast. They are all National Equipment manuals. For instance one is titled:

Instruction book for the National Model BM:282 Radio Receiver Kit. All the pix are there as well as the Heathkit type assembly instructions. One page has a picture on it of the front panel. Without digging around in some of my older literature (which I have plenty of) it kind of looks like an NC-57. I think. Never trust a fading memory. Anyway this radio also has a Navy Department, Bureau of Ships Contract NObsr-39254 designation. Funny that it would say Radio Receiver Kit. But thats apparently just what it was.

A second manual says "Communication Receiver Type RCE" made for the Department of Commerce, Bureau of Air Commerce. Definately made by National. Has the big "PW" style dial right smack in the middle of the panel. Other controls are Off-B+-rec., Tone, RF Gain, AVC-MVC-OW, Audio Gain, CW Osc and a toggle switch that is labeled "INS" on-off. Course there's a band switch right under the PW dial. Band in use is indicated by 5 holes in the front panel with the freq range in use marked beside them. The holes show white when selected.

Also included was a manual for the Type RCE-3 receiver which appears to be similar.

The last one is a manual for the RCQ Communications receiver. Again made by National for the Civil Aeronautics Administration. Contract Cca-26227, dated Feb. 5, 1948. This receiver according to the book was originally an RCK or RCL until changes were incorporated to make it the RCQ.

All 4 manuals are in excellent, almost new in shape. I really don't have any use for them but would prefer to swap them for something the previous owner would like to find. If your interested and have some older National manuals to dispose of, drop me a line.

Larry W00GH@ix.netcom.com

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Joe Serocki <JSEROCKI@allstate.com>
Subject: NETS???
Message-ID: <s222a554.089@allstate.com>

I am looking to compile a list of all nets for the old boat anchor/firebottle gear. Any help would be appreciated.

73, n9ifg

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: paz <paz@world.std.com>
Subject: Prices for used tubes?
Message-ID: <Pine.3.89.9608271227.B16093-0100000@world.std.com>

I have a bunch of power tubes to sell, but don't know what the going/reasonable asking prices are these days. A fellow suggested ~\$125 for used 4-1000A's, but I thought I'd scope it out.

Here's what I've got, as best I can recall:

QTY	Description	Notes
2	4-1000A	Used, pulls. Believed to be working okay.
1	SK-506	socket for above
1	??	chimney for above

2 4-400A Look new; I don't think they've ever been
turned on.

2 4-125 Also look good.

4 8122 Known to be unused, excellent shape.

cheers-
=paz=
Philip Zimmermann
paz@world.std.com
somewhere near Boston.

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: w7ni@teleport.com (Stan Griffiths)
Subject: Re: Prices for used tubes?
Message-ID: <199608272203.PAA16650@desiree.teleport.com>

>
>I have a bunch of power tubes to sell, but don't know what the
>going/reasonable asking prices are these days. A fellow suggested ~\$125
>for used 4-1000A's, but I thought I'd scope it out.
>
>Here's what I've got, as best I can recall:
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>
> 4 8122 Known to be unused, excellent shape.
>
>
>
>cheers-
>=paz=
>Philip Zimmermann
>paz@world.std.com

>somewhere near Boston.

Hi Philip,

I have bought used 4-1000A tubes before and here is what I like to do when I see them for sale. I ask the seller if I can test them first. If he says no, I pass on them. If he says yes, I take them home and plug them into my 4-1000A tube tester. If they test good with lots of output, they are worth about \$100 each. If they test poor with low output, some people will pay \$25 each for them, but I am not interested in low output tubes at any price.

I suspect you are wondering about my 4-1000A tube tester. Well, I built a grounded grid class B linear amplifier more than 20 years ago that uses a pair of 4-1000As in parallel and each tube is metered separately with regard to plate current and grid current. It was a little tricky to meter parallel tubes separately but I was able to do it. I have the ability to drive this amplifier hard (if I want to) with an SB200 and run it on 80 through 10 meters. I can plug my best performing tube in one side of this amplifier and plug an unknown tube in the other side. Then I can drive them both under identical conditions and compare the unknown tube to the known good one. Low emission tubes tend to hog more driving current and run less plate current than a good one. The differences become real obvious in this test. I know in minutes whether I want to buy the previously unknown tube or not.

I have tested dozens of 4-1000As in this fashion for friends and I have built a second "4-1000A tube tester" in cooperation with a friend of mine. I don't know how this helps you but it is how I overcome the questions of 4-1000A used tube condition.

If you were close to me, I would say to bring the 4-1000As over and we will see what they will do. You would then know how to price them. It probably would not pay to ship them across the country just to get them tested.

The same concept should work every bit as good for the 4-400 and 4-125 you have.

An aluminum 4-1000A socket is worth about \$50 and a chimney about \$25. Plastic 4-1000A sockets are worth about \$20.

Stan w7ni@teleport.com

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: KA9EGW@aol.com
Subject: R390 veeder-root flap
Message-ID: <960827194802_511143567@emout07.mail.aol.com>

perhaps it's a blackout flap?

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: jproc@worldlinx.com
Subject: RE: R390 veeder-root flap
Message-ID: <Chameleon.4.01.2.960827202527.jproc@jproc>

Perhaps this was a custom ordered shield to hide the tuned frequency from unauthorized eyes.

Regards,

~~~~~  
Jerry Proc VE3FAB  
E-mail: jproc@worldlinx.com  
Radio Restoration Volunteer  
HMCS Haida, Toronto Ontario  
~~~~~

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: provero@connix.com
Subject: Re: R392 vs. R390A
Message-ID: <199608270036.UAA05236@comet.connix.com>

In <s2218e45.069@nms.com>, on 08/26/96 at 10:50 AM,
Glenn Finerman <GFINDER@nms.com> said:

>I am considering purchasing an R392 from Fair Radio. Could someone give
>me brief rundown as to the differences between the R392 and the R390A?

The R-392 is a ruggedized compact version of the R-390. It was designed for military vehicles with 28 volt electrical systems (24 volts on battery, 28 volts with the engine on.). The case is made of a single piece (milled or welded up, depends on manufacturer) with no ventilation holes. The original connectors had to be waterproof so that the radio could survive fording creeks in jeeps.

>Does the R392 have the mechanical filters like the R390A?

No. It has LC filtering similar to that used in the R-390, but there are only 3 selectivity positions -- 8, 4, and 2 KHz. Works fine for SWling and casual amateur SSB/CW/RTTY.

>Are there any performance differences between the two? I know the R392

>uses 26volt filament tubes. is that also the B+ for the radio? and one
>more question...are these 26v tubes hard to find? Would it be possible
>to "re-tube" this radio today with new tubes?

26 volts is also the filament voltage. Works fine.....

Fair Radio has plenty of these tubes. For \$20 or so you can get at least one, and several of the most common, of each tube used in the 392. That's a decent spares kit.

I have two R-392s now and have previously owned another. Never had a tube go bad in all that time (but it is nice to be prepared). The radios are good performers and have very nice audio. And you'll get all the "wristmaster" band change exercise of the larger R-390/390A.

P.J. "Josh" Rovero home: provero@connix.com
 radio: KK1D

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: "Thomas A. Adams" <103360.2133@CompuServe.COM>
Subject: Re. No Wonder Castro Won!
Message-ID: <960827055345_103360.2133_JHL106-1@CompuServe.COM>

Hello Mike.

Re. Castro and the BC-348 in the Sierra Maestra; I've seen the film footage you're referring to in a couple of other places.

Packin' those radios around the mountains is impressive enough, but what I wanna see is the poor dude who was stuck with the job of schlepping around the power supply!

As Mister Rodgers might say, "Boys and Girls, can YOU say 'Gasoline Generator'?"

And I always thought that guerillas always traveled LIGHT!!!

73's,

Mr. T., K9TA

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996

From: spr@earthlink.net (Scott Robinson)
Subject: Rider Manuals
Message-ID: <v01530506ae47e258f488@[153.37.85.67]>

The last volume of radio stuff is Volume 22 or 23, I think. they did some TV data as well. What I expect happened is that Sams data was better and the market voted with their dollars. I think Riders is long gone, although that's guesswork, but Sams is still there in Indianapolis, IN.

Regards,

Scott Robinson
spr@earthlink.net
"Wait'll he puts on his stereo headphones..."

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: "Garey Barrell, K40AH" <75025.73@CompuServe.COM>
Subject: Re: Rider Manuals
Message-ID: <960827225415_75025.73_FHD60-1@CompuServe.COM>

Howard W. Sams started up about 1947.

Rider used information provided by the manufacturer, sometimes very limited. Sams actually went out and purchased (or borrowed,) each item, made all their own measurements and photographs, and generally provided far better information than Riders. Sams also drew their own schematics, with a standard set of graphic elements, that made them much easier to read. They also provided voltage measurements and typical waveforms where appropriate right on the schematic. Sams also provided cross-references for parts where possible.

No comparison, in my opinion! I don't imagine Riders service information lasted very long in that situation. I do think they published "How-to" service books for quite a while, but not sure.

73, Garey - K40AH
75025.73@compuserve.com
Atlanta

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Clark Fishman (FSAC) <cfishman@PICA.ARMY.MIL>
Subject: Shelby
Message-ID: <9608270736.aa00277@COR6.PICA.ARMY.MIL>

Some questions about Shelby Fest: are the selling spots reserved or first come-first served??? Is any electricity available in the selling area (tail gating) for an RV to get power..???

Clark Fishman WA2UNN cfishman@pica.army.mil going to Shelby

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: wd4mgm@ix.netcom.com (CARL WHITAKER)
Subject: Re: Shelby
Message-ID: <199608271402.HAA00457@dfw-ix11.ix.netcom.com>

Clark wrote:

>

>Some questions about Shelby Fest: are the selling spots reserved
>or first come-first served??? Is any electricity available in the
selling area (tail gating) for an RV to get power..???

Flea market and camping spots cannot "officially" be reserved and are on a first come-first served basis. However, it is common practice for folks living within a couple of hours drive to go in up to a week ahead of the fest to lay claim to spots by placing campers, tables, etc. on and marking off their places. Some of the lucky ones actually just camp there all week.

Electricity and water is available (within approx. 75') at all of the designated "camping" spaces, being 20' wide instead of the normal 10' wide flea market space. Electricity is available for a small percentage of flea market spaces, depending on where they are and how long an extension cord you have. Naturally those spaces are usually taken by opening time of the fest.

Hope the info helps,

Carl
WD4MGM

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Clark Fishman (FSAC) <cfishman@PICA.ARMY.MIL>
Subject: Shelby
Message-ID: <9608271026.aa20372@COR6.PICA.ARMY.MIL>

Tnx to all on Shelby info...looks like it is a winner

Say HI to me

Clark Fishman WA2UNN

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: "Rhett T. George" <rtg@ee.duke.edu>
Subject: Shelby
Message-ID: <9608271856.AA22551@feller>

- Greetings -

I look forward to seeing as many of you as possible on Saturday before and somewhat after lunch, maybe around the hotdog hexode at noon. If anyone is seriously interested in another BC-221 (\$25 w/o power supply, \$35 with homebrew p/s), very seriously interested in a 2 meter Motorola vacuum tube amplifier - 250 W (weighs 186 pounds), or in an NOS 21C0P4 still in its Sylvania carton, please advise me and I shall bring it. If you are mildly interested in the 250 W amp and are traveling I-85 past Durham, NC, to get to or from Shelby, I invite you to stop by and see it without me lifting it.

Everybody travel safely.

73 Rhett - KE4HIH

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: "William B. Ross" <billross@txdirect.net>
Subject: Re: Speakers in Collins 516F-2 P.S.???
Message-ID: <32227754.6EAA@txdirect.net>

Jim:

I can't remember if the power supply had a speaker option but it did set in a speaker enclosure so obtaining the cuttout would have been no proglem: it has a Cpllins part number.

Bill K5LLK

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: tomrice@netcom.com (Tom R. Rice)
Subject: Super-Pro phasing failures?
Message-ID: <199608271628.JAA17148@netcom3.netcom.com>

>For completeness, I'll mention that, like so many other Super-Pro's, the
>phasing shaft's broken on this thing, too.

I keep seeing comments like this and, since I now have
a Super-Pro being UPS'ed across the country, I'm curious
as to the nature of this failure mode and the cure(s)
thereof. I don't yet have the receiver in hand, so
I'm not yet able to analyze the problem.

Old Super-Pro hands undoubtedly have the answer!

tnx de WB6BYH

--

"Start off every day with a smile and get it over with." --W.C.Fields
Tom R. Rice
tomrice@netcom.com
CIS: 71160,1122

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: "B. D. Hall" <BDHall@ghgcorp.com>
Subject: Re: Super-Pro phasing failures?
Message-ID: <322347A4.5B2A@ghgcorp.com>

Tom R. Rice wrote:

> >For completeness, I'll mention that, like so many other Super-Pro's, the
> >phasing shaft's broken on this thing, too.
> I keep seeing comments like this and, since I now have
> a Super-Pro being UPS'ed across the country, I'm curious
> as to the nature of this failure mode and the cure(s)
> thereof. I don't yet have the receiver in hand, so
> I'm not yet able to analyze the problem.

A fellow Houston BA member aquired six ratty but restorable Super-Pro 200's
and 400's about a month ago, and distributed them to us Houston BA types...

I think out of all of them, only two or so (including the one I bought,
heh heh heh) had the phasing shaft assembly intact. If I remember
correctly, this is the really long shaft that reaches from the front panel
to a can in the rear of the set. I'd guess that the failure mode had
something to do with this long shaft being supported only at the panel and

can, and being at the top of the set where it can easily get caught on stuff and broken. The shaft is all metal until reaching the can, where there is a coupler. From about 1/2 outside of the can, the shaft is some sort of phenolic, which I'd guess is pretty fragile. This phenolic is the part I have seen broken in these SP's, not the metal shaft.

In my opinion, the failure mode is just a poorly supported shaft located in

73,

Ben

(Not an old Super-Pro person, yet! But I do have two of 'em tho! All hail Hammarlund!)

--

* Benjamin D. Hall, Houston Texas *
* BDHall@GHGCorp.com BHall@GP802.jsc.nasa.gov *

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996

From: Bill Sorsby <bill.sorsby@dlep1.itg.ti.com>

Subject: Re: Super-Pro phasing failures?

Message-ID: <199608280145.UAA04223@dlep1.itg.ti.com>

Tom, the problem as you'll understand when you get your Super-Pro, is that the shaft of the crystal phasing capacitor is phenolic and brittle. It's especially fragile because of the way it is attached to the capacitor shaft. The shaft of the capacitor is about 1/8" diameter and the 1/4" diameter phenolic rod is bored out to accommodate it. The broken shafts I've looked at closely all showed that the phenolic was bored deeper than it needed to be. This hollow tube with 1/16" thick walls is durable enough for normal handling but not for anything rough. Naturally, whenever the knob gets mishandled the phenolic snaps. Even dropping a coffee mug on the phasing knob would probably break the shaft.

It's bad enough that the shaft breaks. What's worse though, is that the shaft is an integral part of the capacitor. Around the capacitor end of the shaft is a metal cup which serves to hold the phenolic shaft in place (via short pin through cup, phenolic shaft and capacitor shaft). This metal cup also serves as a washer to hold the capacitor rotor in place. If the phenolic shaft and cup assembly are removed then the springs on the capacitor rotor pull the rotor against the stator shorting the capacitor out. I have two SP-200's with repaired phasing shafts. (I didn't repair them, BTW.) Considerable labor was expended to repair both, as both have pins holding the replacement shafts in place. I consider both to be

"marginal" repair jobs. I'll add, though, that I have not yet attempted this repair and so am not sure that I could do much better!

I'm sure this is more than you wanted to know, Tom. But, you did ask...

I hope that your Super-Pro doesn't have this particular problem. Of the 9 Super-Pro's I've had in my lifetime only 3 have had original phasing shafts!

Regards,
Bill Sorsby, N5BU bill.sorsby@dlep1.itg.ti.com

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Terry Burge <terrybu@netman.ENS.TEK.COM>
Subject: SX-88 sale
Message-ID: <9608272020.AA02688@netman.ENS.TEK.COM>

Gang,

I have no connection with Michael who is selling the SX-88 and have never seen it. I found the posting on rec.radio.swap and corresponded with him, realized it was too much for me, and got permission to and passed it on to the list. PLEASE DO NOT ask me to give any reference for Michael or details of the equipment because I have never met him or seen the equipment. One of the members, Dave H. email that he had got the top bid on it. FWIW.
Terry

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Glenn Finerman <GFINER@nms.com>
Subject: Thanks and help
Message-ID: <s222e13c.004@nms.com>

A big BA thank you to all who responded to my inquiry about R392 receiver information. Because of all the great advise I received I can now make an intelligent decision based on information from actual users of this receiver! THANK YOU ALL !!!!

My help request is for information about ELECTRIC RADIO Magazine
All I could find was:
Electric Radio Magazine
POB 57
Hesperus, CO.

No phone number? No zip code?....How would I get subscription

information? Could someone who subscribes please E-mail me with the info?....Thanks...

Glenn Finerman N2BJG GFINER@NMS.COM

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: Pete McCollum 27-Aug-1996 1120 -0600 <mccollum@ssdevo.ENET.dec.com>
Subject: TR-20C "Village Radio"
Message-ID: <9608271720.AA17281@us3rmc.pa.dec.com>

Want to buy, and need any sort of info on:

A "Village Radio" TR-20C. It would be Vietnam era equipment with the nomenclature plate in both English and Vietnamese. That's all I know about it. It's probably something similar to the Hallicrafters HT-1's, but I'm not sure.

Thanks,
Pete
mccollum@ssdevo.enet.dec.com

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: JOHN_SEHRING.parti@ecunet.org
Subject: TRANSPARENT SILICON DEVICE!
Message-ID: <9608271730.aa14376@pcusa01.ecunet.org>

Just saw another term for vacuum tube: transparent silicon device.

-John Sehring (08/27/96 11:06 am MT @Baker, Montana) UCC wb2eqg

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: Unimat
Message-ID: <Pine.ULT.3.91.960827174444.3445A-100000@dua150.kpt.emn.com>

Paul Bock asked about Unimat lathe/milling machine combos...

They were available as of about six years ago. We have a Maximat lathe/milling machine combo in our lab. These are a step larger than the Unimat series. We later needed additional capacity. We paid several (~5) thousand for what we had and when we saw the new prices, we went out and bought a new full sized lathe and a separate milling machine for about half the cost. Unless you can find used ones, the imports are a much better buy.

We had one of our best machinists come set up both the Maximat and the imported (Jet, I think) machines. We were surprised to find that once properly shimmed and adjusted, the imported machines were BETTER than the German Maximat! This machinist did take about three full days on each machine, however. This is something you will not likely do at home.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: "Paul Bock" <pauboc@smtplink.pulse.com>
Subject: Unimat - still available?
Message-ID: <9607278411.AA841171113@smtplink.pulse.com>

Does anyone know if the "Unimat" combo lathe/drill press/milling machine is still being manufactured, and how I might contact the company/supplier? I need one for making replacement mechanical BA parts. :-)

73,

Paul, K4MSG

From boatanchors@theporch.com Tue Aug 27 22:12:46 1996
From: wb6zwc@ns.net
Subject: Re: Unimat - still available?
Message-ID: <199608272244.PAA28096@tomcat.ns.net>

At 10:33 AM 8/27/96 -0500, you wrote:

> Does anyone know if the "Unimat" combo lathe/drill press/milling
> machine is still being manufactured, and how I might contact the
> company/supplier? I need one for making replacement mechanical BA
> parts. :-)

>

> 73,

>

> Paul, K4MSG

>

>Paul, the Unimat is no longer be made. According to Micro Mart only the Sherline lathe and milling machines are made in California.

Micro.Mark---1800 225 1066---the machines are currently on sale.

>

>

=====

Wanted 312-B3
Richard@Sacramento,Ca.

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: Dave Meier <71571.1744@CompuServe.COM>
Subject: VHF Flea Market report, Vernon, CT
Message-ID: <960827015204_71571.1744_FHD63-1@CompuServe.COM>

This event is an offshoot from the annual conference of the New England Weak Signal Society.

Quite small, but there were some BA goodies, which I managed to snag much of:

Sighted were a bunch of tube and newer commercial test gear, waveguide plumbing, etc.

Of more interest to the BA list:

Heath SB-110 6 meter SSB transceiver with manual and DC supply, \$100, followed me home.

Vibroplex Vibrokeyer paddles, \$35, followed me home, too.

Vibroplex Original Deluxe, in case, \$45, marked down to \$40, (mine too!).

Not much else of interest.

I would appreciate help finding an AC supply for the SB-110.

I also would like a manual for an Ameco VFO-621.

Special note:

I just figured out that my e-mail "service" provider limits my message buffer to 100 messages.

If any of you ever tried to send me anything that bounced, that may have been why.

Please keep trying.

Oh yeah, see you all at Shelby.

Look for black hat (N4MW/Dave) along with XYL in red hat (Cissy/N4ZRW).

73, Dave N4MW

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: Merv Schweigert <k9fd@htc.net>
Subject: Wanted
Message-ID: <9608270046.AA11194@ns.htc.net>

Looking for a Heathkit DX-40 parts rig, what I need is the chassis, power transformer, meter and few other parts. My panel is not mint but could be used. Can use it with or without the cabinet, although cabinet preferred. Any junkers or not working ones around ? Thanks 73 Merv K9FD

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*****
* Merv Schweigert           Key Collector, Paddles, Bugs, Straight Keys *
* 9694 S. Prairie Road                                           *
* Red Bud, Ill 62278      Looking for Keys and code/telegraph Items.. *
* 618-282-3953 Voice                                           *
* 618-939-FAXX Fax       Appreciate any calls or leads..... *
* k9fd@htc.net E-mail                                           *
*                               K9FD Know Code                               *
*****
```

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: "Manuel A. Maseda" <mmaseda@gte.net>
Subject: Where to get HP 410C fixed?
Message-ID: <3222E748.7D06@gte.net>

I have a HP 410C meter that needs repair. (AC volts do not work on lower scales) Does anyone know someone other than Tucker who can fix it?

Manuel WF1J

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996
From: n5off@w5ddl.aara.org
Subject: WTB Nice SP-600
Message-ID: <449799@w5ddl.aara.org>

Greetings all . . .

Looking to buy a nice SP-600, must be a 9+.

I don't want to spend a bunch of time in the shop with this as I do with the 390's as this will be for everyday show/use. So I'd really prefer a gem plug and play unit.

73 de tom

From boatanchors@theporch.com Tue Aug 27 17:03:56 1996

From: Merv Schweigert <k9fd@htc.net>
Subject: Xtals
Message-ID: <9608271702.AA28105@ns.htc.net>

I am still in need of a couple of xtals to finish out a drawer. They are ft241 holders, black with white tops with a channel number and freq. marked on the top.

channel 15, 21.5mhz
channel 34, 23.4mhz
channel 47, 24.7mhz
channel 48, 24.8mhz
channel 49, 24.9mhz

Also looking for some ft243 to finish out a channels 1 to 388,
Any one have some of these around extra ? Thanks Merv

```
*****
* Merv Schweigert           Key Collector, Paddles, Bugs, Straight Keys *
* 9694 S. Prairie Road                                     *
* Red Bud, Ill 62278      Looking for Keys and code/telegraph Items.. *
* 618-282-3953 Voice                                           *
* 618-939-FAXX Fax       Appreciate any calls or leads..... *
* k9fd@htc.net E-mail                                         *
*                               K9FD Know Code                 *
*****
```

From boatanchors@theporch.com Tue Aug 27 04:55:11 1996
From: "Benjamin D. Hall" <bdhall@ghgcorp.com>
Subject: [Fwd: FS: Khron-Hite Power supply]
Message-ID: <32224FAD.6FCA@ghgcorp.com>

This is a multi-part message in MIME format.

-----5AE46C4F67CA
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Folks, the following is from rec.radio.swap.

This power supply just screams USE ME FOR BA STUFF!!!!!!

Respond to sender, not me.

73,
Ben (wishing I lived in central Indiana, I could really use this unit)
--

From the computer of
Benjamin D. Hall, Houston Texas
BDHall@GHGCorp.com -or- BHall@GP802.JSC.NASA.gov

-----5AE46C4F67CA

Content-Type: message/rfc822

Content-Transfer-Encoding: 7bit

Content-Disposition: inline

Path: news2.ghgcorp.com!news.jsc.nasa.gov!pendragon!news.msfc.nasa.gov!
news.sgi.com!spool.mu.edu!howland.erols.net!nntp04.primenet.com!nntp.primenet.com!
winternet.com!uunet!in2.uu.net!news.thepoint.net!news1!holly.holli.com!news
From: lneuzer@holli.com
Newsgroups: rec.radio.swap
Subject: FS: Khron-Hite Power supply